



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,073	03/30/2004	José Renato Santos	100201443-2	5483

7590 07/03/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
----------

CHANG, RICHARD

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

07/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/814,073

Applicant(s)

SANTOS ET AL.

Examiner

Richard Chang

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02/28/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because they do not include **descriptive text identification** for the reference sign(s) in the figures:

Regarding to Fig. 1, there is no descriptive text identification fro reference number **104, 106, 108, 110, 112** in Fig. 1.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21-24 are nonstatutory because they are directed to a computer program per se since it is not embedded in a computer readable medium as set forth in p.52 of the interim Guideline.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 2616

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 21-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 21-24: Claims 21-24 are rejected under 112.1<sup>st</sup> for inadequately written to provide support for the claimed subject matter since the specification does not disclose any "computer program product", "a computer usable medium" as claimed. Therefore, the specification fails to teach one skilled in the art how to make and use the claimed invention without undue experimentation.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for

Art Unit: 2616

purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent No. 7,136,353 B2 ("Ha et al.").

Regarding claims 1, 13, 17 and 21, Ha et al. teaches a method and system for controlling congestion in a communications network to improve quality of service comprising of

receiving congestion feedback data (response) relating to network (following TCP communication protocol),

adjusting at least one of a window limit and a rate limit based on congestion feedback data (inherently in well known in TCP communication protocol dealing with window size and rate limit wherein TCP communication protocol participates in congestion control by setting a value that dictates the maximum congestion window size before the growth rate of the congestion window size slows down), and

injecting data packets onto network according to window limit and rate limit (conventional TCP protocol) (See Fig. 1, Col. 6, lines 38-64).

Regarding claims 2, 14, 18 and 22, Ha et al. further teaches that decreasing rate limit and window limit if network is determined to be congested based on congestion feedback data (See Fig. 5B, step 522, Col. 10, line 64 to Col. 11, line 28).

Regarding claims 3, 15, 19 and 23, Ha et al. further teaches that increasing, based on a limiting factor, at least one of rate limit and window limit if network is determined not to be congested based on congestion feedback data (See Fig. 5B, step 516, Col. 10, line 64 to Col. 11, line 28).

Regarding claims 4, 16, 20 and 24, Ha et al. further teaches that the limiting factor is determined based on whether the transmission of a data packet was most recently limited by at least one of rate limit and window limit (See Fig. 6, step 612, Col. 12, line 57 to Col. 13, line 28).

Regarding claims 5 and 11, Ha et al. further teaches that only rate limit is increased if limiting factor is determined by rate limit (where rate limit may be independent controlled) (See Fig. 6, step 612, Col. 13, lines 28-55).

Regarding claims 6 and 10, Ha et al. further teaches that only window limit is increased if limiting factor is determined by window limit (See Fig. 5B, step 516, Col. 10, line 64 to Col. 11, line 28).

Regarding claims 7-9 and 12, Ha et al. further teaches that limiting factor is a value between a predetermined high threshold and a predetermined low threshold and adjusting size of the packet size (congestion window controlled by sum of all connection

Art Unit: 2616

adjustable by host-level variable in predefined range) (See Fig. 2, Col. 7, line 33 to Col. 8, line 6).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*rn*

rkc

Richard Chang  
Patent Examiner  
Art Unit 2616

*Wing Chan*  
*6/25/07*

**WING CHAN  
SUPERVISORY PATENT EXAMINER**